



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/534,256

05/10/2005

Tuija Hurta

60091.00397

2827

32294 7590 01/10/2007
SQUIRE, SANDERS & DEMPSEY L.L.P.
14TH FLOOR
8000 TOWERS CRESCENT
TYSONS CORNER, VA 22182

EXAMINER

LAI, DANIEL

ART UNIT

PAPER NUMBER

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

3 MONTHS

01/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/534,256

Applicant(s)

HURTTA, TUIJA

Examiner

Daniel Lai

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 7-10, 17-19, 21 and 23-26 is/are rejected.
- 7) ☒ Claim(s) 2, 11 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 05/10/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Syrjala (WO 01/91445, hereinafter WO'445).

3. WO'445 teaches a method for arranging billing comprising a first layer and a second layer (page 4, line 32-33), both are capable of transmitting service (page 1, line 26-31), the network node transmits a first piece of information to first layer charging function indicating first layer charging data being attended by second layer charging function, where CSE_T has a database containing the first piece of information (page 10, line 33-page 11, line 2). The database transmits the information to CSE_T as needed because the first piece of information is located within the database.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2634

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 4, 7-10, 17, 19, 21, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO'445) in view of Fabritius et al. (US Patent 6,345,182, hereinafter Fabritius).

4. Regarding claims 1 and 19, WO'445 teaches a method for arranging billing comprising a first layer and a second layer (page 4, line 32-33), both are capable of transmitting service (page 1, line 26-31); a first network service control function CSE_T (first layer charging function) (page 6, line 14-15); a second network service control function CSE_A (second layer charging function) (page 8, line 9-10); a network node collecting charging data on the first layer (page 9, line 13-14); the method comprising:

receiving a first piece of information indicating that the first layer charging data are attended to by the second layer charging function by detecting that CSE_A is responsible for the prepaid account of the prepaid subscription (page 10, line 33-35) (detection does not contain charging data); and transmitting to the CSCF (network node) in response to the first piece of information instruction that tariff (charging data) are to be transmitted to the second layer charging function (CSE_A) (page 11, line 8-10).

Art Unit: 2634

5. WO'445 does not explicitly teach not to transmit charging data to the first layer charging function. Fabritius teaches charging method in a telecommunications system comprising a charge determination point is an external node (col. 2, line 43-44), and therefore the charging data is not transmitted to the first layer charging function. Fabritius further teaches that the method comprising transmitting charging information between different networks (col. 2, line 33-53).

According to Applicant's specification, the layers are simply different networks such as "Packet Switched domain" and "IMS domain" (instant application, page 4, line 34-35), and hence the Fabritius reference is an analogous art. It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the billing system taught by WO'445 with the external charging node taught by Fabritius to provide an external charge determination point to a mobile switching center acting as charging point for a call originating mobile terminal, as taught by Fabritius (col. 2, line 25-32).

6. Regarding claim 7, WO'445 teaches all the limitations of claim 1 as applied above. WO'445 further teaches the billing method uses online charging (page 3, line 6-16).

7. Regarding claims 8 and 9, WO'445 teaches the first network is IP telephony network (application layer) (page 8, line 31-32) and the second network is access network (bearer) (page 1, line 15-17). WO'445 further teaches CSE_T from the IP telephony network can be responsible for the charging (page 12, line 14-15), in which case, the access network will be the first network and the IP telephony network will be the second network.

8. Regarding claims 4 and 21, WO'445 teaches a method for arranging billing comprising a first layer and a second layer (page 4, line 32-33), both are capable of transmitting service (page 1, line 26-31); a first network service control function CSE_A (first layer charging function)

Art Unit: 2634

(page 8, line 9-10); a second network service control function CSE_T (second layer charging function) (page 6, line 14-15); a network node collecting charging data on the first layer (page 9, line 13-14); the method comprising:

transmitting information instruction to network node that tariff (charging data) are to be transmitted to the first layer charging function (CSE_A) (page 11, line 8-10); and receiving a first piece of information indicating that the first layer charging data are attended to by the second layer charging function by detecting that CSE_A is responsible for the prepaid account of the prepaid subscription (page 10, line 33-35) (detection does not contain charging data).

9. WO'445 fails to teach ignoring charging data from the first layer in the first layer charging function.
10. Fabritius teaches disregarding tariff information from external charge determination point (col. 2, line 50-51). It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the billing system taught by WO'445 with the charging system taught by Fabritius so that when calls are belong to different class will not be charged (col. 2, line 50-52).
11. Regarding claim 24, WO'445 teaches all the limitations of claim 1 as applied above. WO'445 further teaches the billing method uses online charging (page 3, line 6-16).
12. Regarding claims 25 and 26, WO'445 teaches the first network is IP telephony network (application layer) (page 8, line 31-32) and the second network is access network (bearer) (page 1, line 15-17). WO'455 further teaches CSE_T from the IP telephony network can be responsible

Art Unit: 2634

for the charging (page 12, line 14-15), in which case, the access network will be the first network and the IP telephony network will be the second network.

13. As of claim 10, WO'445 teaches a system for arranging billing comprising a first network (layer) and a second network (page 4, line 32-33), both are capable of transmitting service (page 1, line 26-31);

a network node collecting charging data on the first layer (page 9, line 13-14);

a billing domain comprising a first network service control function CSE_T (first layer charging function) (page 6, line 14-15); a second network service control function CSE_A (second layer charging function) (page 8, line 9-10);

the billing domain transmit information to first layer charging function indicating first layer charging data being attended by second layer charging function (page 10, line 33-page 11, line 2), where a database transmits the information to CSE_T;

receiving a first piece of information indicating that the first layer charging data are,

attended to by the second layer charging function by detecting that CSE_A is

responsible for the prepaid account of the prepaid subscription (page 10, line 33-35)

(detection does not contain charging data) and transmitting to the CSCF (network

node) in response to the first piece of information instruction that tariff (charging

data) are to be transmitted to the second layer charging function (CSE_A) (page 11,

line 8-10).

14. WO'445 does not explicitly teach the network node not to transmit charging data to the first layer charging function. Fabritius teaches charging method in a telecommunications system comprising a charge determination point is an external node (col. 2, line 43-44), and therefore the

Art Unit: 2634

charging data is not transmitted to the first layer charging function. It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the billing system taught by WO'445 with the external charging node taught by Fabritius to provide an external charge determination point to a mobile switching center acting as charging point for a call originating mobile terminal, as taught by Fabritius (col. 2, line 25-32).

15. Regarding claim 17, WO'445 teaches a common database from first and second layer charging functions maybe be used to store the first piece of information (page 11, line 2). The database is used to transmit the first piece of information to the first layer charging function.

16. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO'445 in view of Fabritius as applied to claim 10 above, and further in view of Hayball et al. (US Patent 6,356,627, hereinafter Hayball).

17. WO'445 teaches many of the limitations of claim 10 as applied above. WO '445 further teaches sending the first piece of information to the first layer (page 11, line 8-10). WO'445 does not teach a correlation function. Hayball teaches a correlation function which correlates billing records from different call managers to provide a single consolidated record for each call (col. 14, line 1-4). It would have been obvious to one having ordinary skill in the art at the time of the invention to use the correlation function as taught by Hayball in the multi networks charging functions taught by WO'445 so that a single record can be provided for each call.

Allowable Subject Matter

18. Claims 2, 11, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Lai whose telephone number is (571) 270-1208. The examiner can normally be reached on Monday – Thursday, 9:00 a.m. – 4:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Garber can be reached on (571) 272-2194. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DL

D.L.



CHARLES D. GARBER
SUPERVISORY PATENT EXAMINER